



## **Grain Transportation Report**

A weekly publication of the Transportation and Marketing Programs/Transportation Services Branch www.ams.usda.gov/tmdtsb/grain

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The next release is Apr. 20 '06

#### **Inland Waterways Users Board Recommends River Improvements**

In its 2006 annual report to Congress, the Inland Waterways Users Board (IWUB) states that once again it is extremely concerned that the Nation's inland waterways are exhibiting signs of serious neglect. The Board indicates that due to budget limitations many projects funded by the Inland Waterways Trust Fund are not being completed on time. Delays in the maintenance of aging facilities are forcing facilities to remain in service for extended periods of time. Emergency repairs can—and often do—stop all traffic at any point on the river system. In 2005, repair work slowed or stopped traffic several times on the Mississippi and Ohio Rivers.

The IWUB highly recommends replacing locks on the Upper Mississippi River and Illinois Waterway (UMR-IW). The Board notes that funding for this project has been omitted from the Administration's FY 2007 budget request, and urges Congress to continue to appropriate funds for this project. From 2000 to 2004, the UMR-IW carried 56 percent of all U.S. corn exports and 35 percent of soybean exports. For 2000-2004, this represents about \$4.9 billion a year in export trade.

Also, the IWUB recommends that Congress require that flows from the Missouri River be sufficient to ensure adequate water levels on the Mississippi River under all but the most severe conditions.

#### Leaks in the lock gate at Lock and Dam 14, near Le Claire, IA.



The IWUB consists of 11 members of the barge industry and representatives from the U.S. Army, Departments of Agriculture, Transportation, and Commerce. The Water Resources Development Act of 1986 created the IWUB to develop and make recommendations regarding construction and rehabilitation priorities on the commercial navigational features and components of the inland waterways.

The Inland Waterways
Fuel Tax was established
to support inland waterway
infrastructure development
and rehabilitation.

Commercial users are required to pay this tax on fuel consumed in inland waterway transportation. Revenues from the tax are deposited in the Inland Waterways Trust Fund, and fund 50 percent of the cost of inland navigation projects each year as authorized. Commercial users pay \$.20 per gallon of fuel in 2006. This tax generates approximately \$100 million in contributions annually to the Inland Waterways Trust Fund. Users also pay a \$.043 per gallon fuel tax to the General Treasury for deficit reduction. However, this tax will be eliminated January 1, 2007. For more information about the IWUB, see <a href="http://www.iwr.usace.army.mil/newusersboard/index.htm">http://www.iwr.usace.army.mil/newusersboard/index.htm</a>, Nick.Marathon@usda.gov.

#### **Grain Transportation Indicators**

Table 1--Grain transport cost indicators\*

	Truck	Rail**	Barge	Ocean	
Week ending				Gulf	Pacific
04/12/06	178	-28	182	156	181
Compared with last week	<b>†</b>	<b>†</b>	$\downarrow$	<b>↓</b>	<b>↓</b>

\*Indicator: Base year 2000 = 100; Weekly updates include truck = diesel (\$/gallon); rail = nearby secondary rail market (\$/car);

 $barge = spot \ Il linois \ River \ basis \ (index = percent \ of \ tariff \ rate); \ and \ ocean = routes \ to \ Japan \ (\$/metric \ ton)$ 

\*\*The rail indicator is not an index. It is the difference between the nearby secondary rail market bid for this week and the average bid for year 2000 (+) 100.

Source: Transportation & Marketing Programs/AMS/USDA

Table 2--Market update: U.S. origins to export position price spreads (\$/bushel)

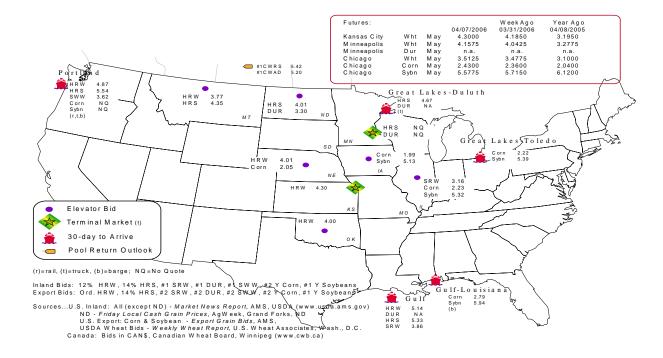
Commodity	Origindestination	4/7/2006	3/30/2006
Corn	ILGulf	-0.56	-0.59
Corn	NEGulf	-0.74	-0.79
Soybean	IAGulf	-0.81	-0.81
HRW	KSGulf	-0.84	-0.84
HRS	NDPortland	-1.53	-1.75

Note: nq = no quote

Source: Transportation & Marketing Programs/AMS/USDA

The **grain bid summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

Figure 1 **Grain bid summary** 



#### Rail Transportation

Table 3--Rail deliveries to port (carloads)\*

			Cross-Border	Pacific	Atlantic &	
Week ending	Mississippi Gulf***	Texas Gulf	Mexico	Northwest	East Gulf	Total
4/05/2006 <sup>p</sup>	1,639	1,797	1,243	4,025	543	9,247
3/29/2006 <sup>r</sup>	1,125	2,578	728	3,996	582	9,009
2006 YTD	28,553	32,105	11,621	59,330	7,568	139,177
2005 YTD	18,933	25,356	18,686	63,834	6,343	133,152
2006 as % of 2005	5 151	127	62	93	119	105
Total 2005**	50,677	99,864	60,879	223,328	15,752	450,500
Total 2004	43,102	92,073	59,102	209,625	10,986	414,888

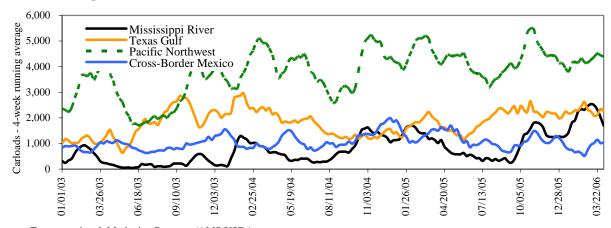
<sup>(\*)</sup> Incomplete Data; as of 9/22/04, Cross-Border movements included; (\*\*) Includes 53rd week; (\*\*\*) Mississippi Gulf data back to January,

2004 from several new sources has been added; YTD= year-to-date; p=preliminary data; r = revised data

Source: Transportation & Marketing Programs/AMS/USDA

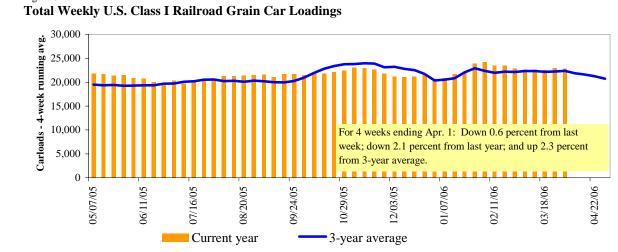
Railroads originate approximately 40 percent of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Figure 2 Rail deliveries to port



Source: Transportation & Marketing Programs/AMS/USDA

Total Weekly U.S. Class I Railroad Grain Car Loadings



Source: Association of American Railroads

Table 4--Class I rail carrier grain car bulletin (grain carloads originated)

	E	ast		West		U.S. total	Ca	nada
Week ending	CSXT	NS	BNSF	KCS	UP		CN	CP
04/01/06	3,412	3,026	9,872	592	5,866	22,768	4,715	4,244
This week last year	3,063	3,399	9,509	601	6,568	23,140	4,728	4,447
2006 YTD	41,518	42,398	131,068	7,063	79,835	301,882	61,124	57,787
2005 YTD	41,109	44,827	126,421	8,867	78,411	299,635	59,028	50,927
Last 4 weeks as % of 2005 <sup>1</sup>	95	93	105	85	93	98	99	126
2006 YTD as % of 2005 YTD	101	95	104	80	102	101	104	113
Total 2005	152,060	167,465	476,033	27,459	307,170	1,130,187	225,817	215,145

<sup>1</sup>As a percent of the same period in 2005.

Source: Association of American Railroads (www.aar.org); YTD = year-to-date

Table 5--Rail car auction offerings\*, week ending 04/08/06 (\$/car)\*\*

Delivery for:	May-06	Jun-06	Jul-06
BNSF <sup>1</sup>			
COT/N. grain	no bids	no offer	\$25
COT/S. grain	no bids	no bids	\$19
$UP^2$			
GCAS/Region 1	no bids	no bids	no offer
GCAS/Region 2	no bids	no bids	no offer

<sup>\*</sup>Auction offerings are for single-car and unit train shipments only.

N includes: ID, MN, MT, ND, OR, SD, WA, WI, WY, and Manitoba, Canada.

S includes: CO, IA, IL, KS, MO, NE, OK, TX, NM, AZ, CA, UT, and NV.

Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

Source: Transportation & Marketing Programs/AMS/USDA

Rail service may be ordered directly from the railroad via **auction** for guaranteed service, or via tariff for nonguaranteed service, or through the secondary railcar market.

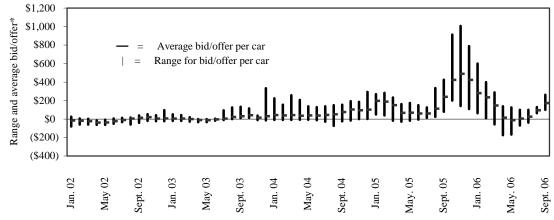
<sup>\*\*</sup>Average premium/discount to tariff, last auction

<sup>&</sup>lt;sup>1</sup>BNSF - COT = Certificate of Transportation

<sup>&</sup>lt;sup>2</sup>UP - GCAS = Grain Car Allocation System

The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/supply.

Figure 4
Secondary rail car market, delivery month-year



\*up to 6 months of trading

Source: Transportation & Marketing Programs/AMS/USDA

**Average bid/offer** is the simple average of all the weekly bids/offers over the entire period (up to 6 months) for guaranteed railcars that are traded for delivery in a particular month.

**Range for bid/offer** shows the range of average weekly bids/offers over the entire period (up to 6 months) for guaranteed railcars that are traded for delivery in a particular month.

Table 6--Weekly secondary rail car market, week ending 04/08/06 (\$/car)\*

	Delivery period				
	May-06	Jun-06	Jul-06	Aug-06	
BNSF-GF	-\$142	-\$22	\$38	\$98	
Change from last week	-\$25	-\$14	\$0	\$13	
UP-Pool	-\$104	-\$13	\$34	\$110	
Change from last week	\$65	\$33	\$6	-\$19	

<sup>\*</sup>Average premium/discount to tariff, \$/car-last week

Note: Bids listed are market INDICATORS only & are NOT guaranteed prices,

Missing value = no bid quoted; GF = guaranteed freight; Pool = guaranteed pool

Sources: Transportation and Marketing Programs/AMS/USDA

Data from Atwood/ConAgra, Harvest States Co-op, James B. Joiner Co., Tradewest Brokerage Co.

Table 7--Tariff rail rates for unit and shuttle train shipments\*

Effective date:					
4/3/2006	Origin Region	Destination Region	Rate/car	Rate/metric ton	Rate/bushel**
<u>Unit train*</u>					
Wheat	Chicago, IL	Albany, NY	\$1,861	\$20.51	\$0.56
	Kansas City, MO	Galveston, TX	\$2,020	\$22.27	\$0.61
	South Central, KS	Galveston, TX	\$2,450	\$27.01	\$0.74
	Minneapolis, MN	Houston, TX	\$3,020	\$33.29	\$0.91
	St. Louis, MO	Houston, TX	\$2,360	\$26.01	\$0.71
	South Central, ND	Houston, TX	\$4,149	\$45.73	\$1.24
	Minneapolis, MN	Portland, OR	\$3,963	\$43.68	\$1.19
	South Central, ND	Portland, OR	\$3,963	\$43.68	\$1.19
	Northwest, KS	Portland, OR	\$4,490	\$49.49	\$1.35
	Chicago, IL	Richmond, VA	\$2,161	\$23.82	\$0.65
Corn	Chicago, IL	Baton Rouge, LA	\$2,610	\$28.77	\$0.73
	Council Bluffs, IA	Baton Rouge, LA	\$2,470	\$27.23	\$0.69
	Kansas City, MO	Dalhart, TX	\$2,365	\$26.07	\$0.66
	Minneapolis, MN	Portland, OR	\$3,130	\$34.50	\$0.88
	Evansville, IN	Raleigh, NC	\$1,961	\$21.62	\$0.55
	Columbus, OH	Raleigh, NC	\$1,850	\$20.39	\$0.52
	Council Bluffs, IA	Stockton, CA	\$3,606	\$39.75	\$1.01
Soybeans	Chicago, IL	Baton Rouge, LA	\$2,655	\$29.27	\$0.80
	Council Bluffs, IA	Baton Rouge, LA	\$2,515	\$27.72	\$0.75
	Minneapolis, MN	Portland, OR	\$3,610	\$39.79	\$1.08
	Evansville, IN	Raleigh, NC	\$1,961	\$21.62	\$0.59
	Chicago, IL	Raleigh, NC	\$2,561	\$28.23	\$0.77
Shuttle Train*					
Wheat	St. Louis, MO	Houston, TX	\$1,820	\$20.06	\$0.55
	Minneapolis, MN	Portland, OR	\$3,763	\$41.48	\$1.13
Corn	Fremont, NE	Houston, TX	\$2,124	\$23.41	\$0.59
	Minneapolis, MN	Portland, OR	\$3,024	\$33.33	\$0.85
Soybeans	Council Bluffs, IA	Houston, TX	\$2,412	\$26.59	\$0.72
-	Minneapolis, MN	Portland, OR	\$3,170	\$34.94	\$0.95

<sup>\*</sup>A unit train refers to shipments of at least 52 cars. Shuttle train rates are available for qualified shipments of more than 100 cars that meet railroad efficiency requirements.

Sources: www.bnsf.com, www.cpr.ca, www.csx.com, www.uprr.com

<sup>\*\*</sup>Approximate load per car = 100 short tons: corn 56 lbs./bu., wheat & soybeans 60 lbs./bu.

Table 8--Tariff rail rates for U.S. bulk grain shipments to Mexico, 2005

Effective date: 4/3/06

Commodity	<b>Origin State</b>	<b>Border crossing region</b>	Train size	Rate <sup>1</sup>	Rate/metric ton	Rate/bushel**
Wheat	KS	Brownsville, TX	Shuttle	\$2,851	\$29.13	\$0.79
	ND	Eagle Pass, TX	Unit	\$4,211	\$43.03	\$1.17
	OK	El Paso, TX	Shuttle	\$2,235	\$22.84	\$0.62
	OK	El Paso, TX	Unit	\$2,432	\$24.85	\$0.68
	AR	Laredo, TX	Unit	\$2,383	\$24.35	\$0.66
	IL	Laredo, TX	Unit	\$3,188	\$32.57	\$0.89
	MT	Laredo, TX	Shuttle	\$3,980	\$40.67	\$1.11
	TX	Laredo, TX	Shuttle	\$2,165	\$22.12	\$0.60
	MO	Laredo, TX	Shuttle	\$2,731	\$27.90	\$0.76
	WI	Laredo, TX	Unit	\$3,405	\$34.79	\$0.95
Corn	NE	Brownsville, TX	Shuttle	\$3,543	\$36.20	\$0.92
	NE	Brownsville, TX	Unit	\$3,623*	\$37.02	\$0.94
	IA	Eagle Pass, TX	Unit	\$3,773	\$38.55	\$0.98
	MO	Eagle Pass, TX	Shuttle	\$3,364*	\$34.37	\$0.87
	NE	Eagle Pass, TX	Shuttle	\$3,764*	\$38.46	\$0.98
	IA	Laredo, TX	Shuttle	\$3,696	\$37.76	\$0.96
Soybean	IA	Brownsville, TX	Shuttle	\$3,318	\$33.90	\$0.92
	MN	Brownsville, TX	Shuttle	\$3,614	\$36.93	\$1.00
	NE	Brownsville, TX	Shuttle	\$3,127	\$31.95	\$0.87
	NE	Eagle Pass, TX	Shuttle	\$3,203	\$32.73	\$0.89
	IA	Laredo, TX	Unit	\$3,357	\$34.30	\$0.93

A unit train refers to shipments of at least 52 cars. Shuttle train are available for qualified shipments of more than 100 cars that meet railroad efficiency requirements.

Sources: www.bnsf.com, www.uprr.com

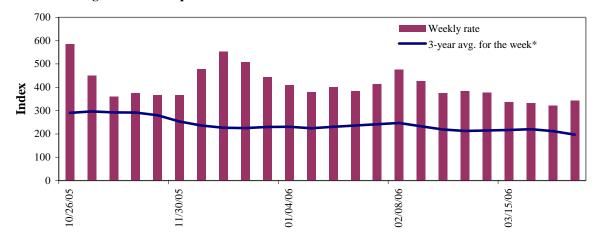
<sup>&</sup>lt;sup>1</sup>Rates are based upon published tariff rates for high-capacity rail cars.

<sup>\*</sup>High-capacity rate not available, rate estimated using published low-capacity tariff rate x 1.08

<sup>\*\*</sup>Approximate load per car = 97.87 metric tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

#### **Barge Transportation**

Figure 5 **Illinois River barge rate index - quotes** 



Note: Index = percent of tariff rate; \*4-week moving average Source: Transportation & Marketing Programs/AMS/USDA

The **Illinois River barge rate index** averaged 183 percent of the **benchmark tariff rates** between 1999 and 2001, based on weekly market quotes. The **index**, along with **rate quotes** and **futures market** bids are indicators of grain transport supply and demand.

Table 9--Barge rate quotes: southbound barge freight

Location	4/5/2006	3/29/2006	May '06	July '06
Twin Cities	384	372	375	383
Mid-Mississippi	354	327	342	349
Illinois River	343	322	330	339
St. Louis	273	263	264	284
Lower Ohio	268	250	257	289
Cairo-Memphis	244	240	237	270

Index = percent of tariff, based on 1976 tariff benchmark rate Source: Transportation & Marketing Programs/AMS/USDA

Benchmark tariff rates

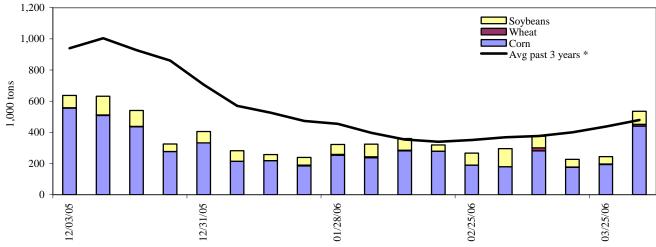
# **Calculating barge rate per ton:** (Index \* 1976 tariff benchmark rate per ton)/100

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map (see figure 6).

Note: The Illinois barge rate is for Beardstown, IL, La Grange Lock & Dam (L&D 8).



Figure 7 **Barge movements on the Mississippi River (Locks 27 - Granite City, IL)** 



\* 4-week moving average

Source: Transportation & Marketing Programs/AMS/USDA

Table 10--Barge grain movements (1,000 tons)

Week ending 4/01/2006	Corn	Wheat	Soybean	Other	Total
Mississippi River					
Rock Island, IL (L15)	89	0	3	0	92
Winfield, MO (L25)	196	2	46	2	245
Alton, IL (L26)	430	11	85	2	528
Granite City, IL (L27)	440	11	84	2	537
Illinois River (L8)	195	2	32	0	228
Ohio River (L52)	99	6	26	0	130
Arkansas River (L1)	0	8	14	5	27
2006 YTD	5,048	326	1,864	252	7,490
2005 YTD	4,490	391	2,259	205	7,345
2006 as % of 2005 YTD	112	83	83	123	102
Total 2005	23,761	1,620	7,276	731	33,388

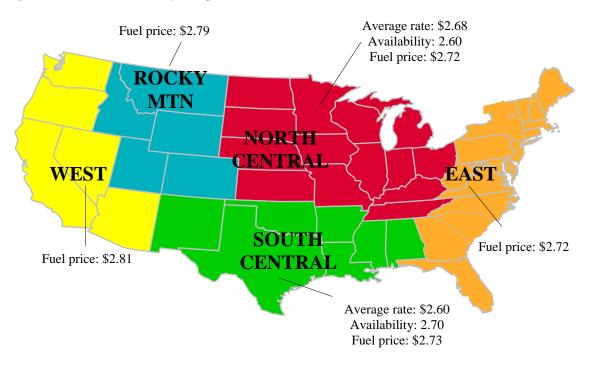
YTD (year-to-date) and calendar year total includes Miss/27, Ohio/52, and Ark/1; "Other" refers to oats, barley, sorghum, and rye.

Source: U.S. Army Corp of Engineers (www.mvr.usace.army.mil/mvrimi/omni/webrpts/default.asp)

Note: Total may not add exactly, due to rounding

### **Truck Transportation**

Figure 8
U.S. grain truck market advisory, 4<sup>th</sup> quarter 2005\*



\*Average rate per loaded mile, based on truck rates for trips of 25, 100, and 200 miles

Note: Fuel prices are a quarterly average (unit per gallon)

Fuel price data source: Energy Information Administration, U.S. Department of Energy, www.eia.doe.gov

Table 11--U.S. grain truck market overview, 4<sup>th</sup> quarter 2005

Region	25 miles	100 miles	200 miles	Truck availability	Truck activity	Future truck activity
		-		Rating com	pared to same quart	er last year
		<sup>1</sup> Rate per mile		1=Very easy	1=M	uch lower
		Rate per fille		to		to
				5=Very difficult	5=Much higher	
National average <sup>2</sup>	3.31	2.46	2.26	2.6	2.9	2.9
North Central region	3.23	2.51	2.29	2.6	3.0	3.0
Rocky Mountain	4.58	2.35	1.95	2.8	3.0	3.0
South Central	3.00	2.42	2.39	2.7	2.5	2.7
West	n/a	n/a	n/a	2.0	3.5	3.0

<sup>&</sup>lt;sup>1</sup>Rates are based on trucks with 80,000 lb gross vehicle weight limit

Source: Transportation and Marketing Programs/AMS/USDA

<sup>&</sup>lt;sup>2</sup>National average includes: AL, AR, CO, IA, ID, IL, IN, KS, LA, MN, MO, MS, MT, ND, NE, OH, OK, OR, SD, TX, WA, WI, and WY.

The **weekly diesel price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37 percent of the estimated variable cost.

Table 12--Retail on-highway diesel prices\*, week ending 4/10/06 (US\$/gallon)

			Change from		
Region	Location	Price	Week ago	Year ago	
I	East Coast	2.676	0.037	0.370	
	New England	2.769	0.038	0.335	
	Central Atlantic	2.767	0.040	0.344	
	Lower Atlantic	2.629	0.036	0.385	
II	Midwest <sup>1</sup>	2.614	0.036	0.351	
III	Gulf Coast <sup>2</sup>	2.601	0.022	0.350	
IV	Rocky Mountain	2.680	0.051	0.281	
V	West Coast	2.812	0.059	0.227	
	California	2.881	0.069	0.256	
Total	U.S.	2.654	0.037	0.338	

<sup>\*</sup>Diesel fuel prices include all taxes.

Source: Energy Information Administration/U.S. Department of Energy (www.eia.doe.gov)

<sup>&</sup>lt;sup>1</sup>Same as North Central <sup>2</sup>Same as South Central

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### **Grain Exports**

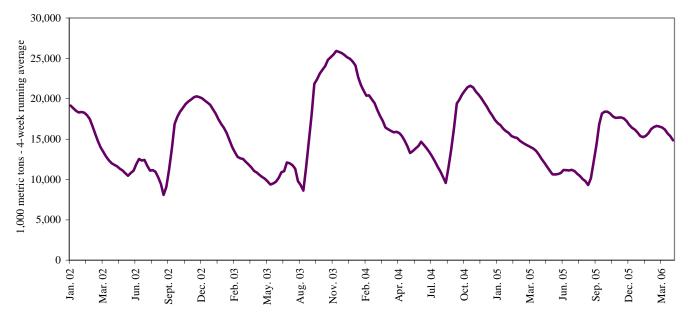
Table 13--U.S. export balances (1,000 metric tons)

			W	heat			Corn	Soybeans	Total
Week ending 1/	HRW	SRW	HRS	SWW	DUR	All wheat	•		
3/30/2006	1,365	285	1,004	641	234	3,528	8,755	1,786	14,069
This week year ago	1,367	231	1,291	556	73	3,519	7,395	2,640	13,554
Cumulative exports-crop year 2	/								
2005/06 YTD	9,229	1,720	6,351	3,622	645	21,566	28,511	19,511	69,588
2004/05 YTD	8,124	2,997	6,614	4,195	594	22,524	26,592	24,733	73,849
2005/06 as % of 2004/05	114	57	96	86	109	96	107	79	94
2004/05 Total	9,407	3,217	8,083	4,773	686	26,117	44,953	29,878	100,948
2003/04 Total	12,697	3,785	6,928	4,895	1,053	29,359	47,704	24,108	101,171

Note: YTD = year-to-date. Crop year: wheat = 6/01-5/31, corn & soybeans = 9/01-8/31, 1/= Current unshipped export sales to date

Source: Foreign Agricultural Service/USDA (www.fas.usda.gov)

Figure 9
U.S. grain, unshipped export balance, including wheat, corn, and soybean sales



Source: Foreign Agricultural Service/USDA (www.fas.usda.gov)

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<sup>2/ =</sup> Shipped export sales to date

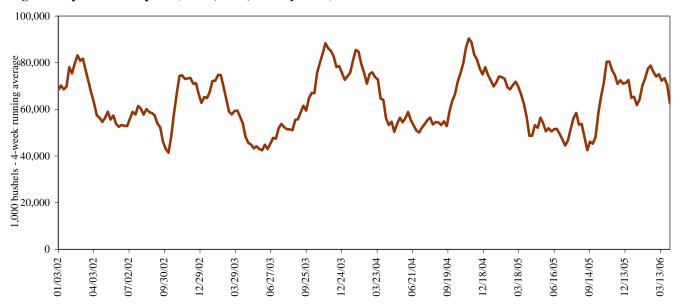
Table 14--Select U.S. port regions - grain inspections for export (1,000 metric tons)

	P	acific Reg	ion	Mississippi Gulf		Texas Gulf			Port Region total			
Week ending	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Pacific	Mississippi	Texas
04/06/06	116	234	30	65	492	156	103	58	0	380	713	161
2006 YTD*	2,987	2,503	1,898	1,176	9,167	5,557	2,136	598	15	7,388	15,899	2,748
2005 YTD	3,063	2,405	2,347	1,576	7,234	6,295	1,625	215	6	7,816	15,105	1,846
2006 as % of 2005	98	104	81	75	127	88	131	278	260	95	105	149
2005 Total *	10,801	10,104	6,225	4,643	27,596	14,793	7,743	810	36	27,130	47,032	8,589

Source: Grain Inspection, Packers and Stockyards Aministration/USDA (www.gipsa.usda.gov); YTD: year-to-date; \*includes weekly revisions

The United States exports approximately one-quarter of the grain it produces. On average, it includes nearly 45 percent of U.S.-grown wheat, 35 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Approximately 55 percent of these U.S. export grain shipments departed through the Mississippi Gulf region in 2004.

Figure 10 U.S. grain inspected for export (wheat, corn, and soybeans)



Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov)

### **Ocean Transportation**

Table 15--Weekly port region grain ocean vessel activity (number of vessels)

				Pacific	Vancouver
		Gulf		Northwest	B.C.
		Loaded	Due next		
Date	In port	7-days	10-days	In port	In port
4/6/2006	16	33	48	1	5
3/30/2006	16	35	46	6	4
2005 range	(1157)	(1056)	(1876)	(216)	(017)
2005 avg.	27	39	53	9	7

Source: Transportation & Marketing Programs/AMS/USDA

Figure 11 **Gulf Port grain vessel loading (past 7 days)** 



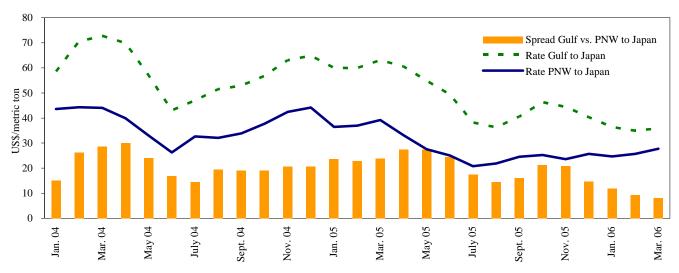
Source: Transportation & Marketing Programs/AMS/USDA

Table 16--Quarterly ocean freight rates (average rates & percentage changes) (US\$/metric ton)

Countries/ regions	2006 1 <sup>st</sup> qtr	2005 1 <sup>st</sup> qtr	Percent change	Countries/ regions	2006 1 <sup>st</sup> qtr	2005 1 <sup>st</sup> qtr	Percent change
Gulf to	_			Pacific NW to			
Japan	37.45	60.18	-38	Japan			
China	30.92	57.50	-46	Argentina/Brazil to			
N. Africa		48.00		China	27.50		
				N. Africa		59.25	
				Meditteranean	29.00		
				N. Europe	33.00		

Source: Maritime Research, Inc. (www.maritime-research.com)

Figure 12 **Grain vessel rates, U.S. to Japan** 



Source: Baltic Exchange (www.balticexchange.com)

Table 17--Ocean freight rates for selected shipments, week ending 4/8/06

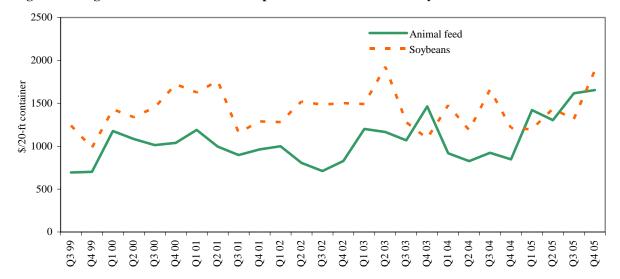
Export region	Import region	Grain	Month	Volume loads (metric tons)	Freight rate (\$/metric ton)
U.S. Gulf	China	Hvy Grain	Feb 20/28	55,000	31.00
U.S. Gulf	N. China	Hvy Grain	Feb 20/28	55,000	29.75
United Kingdom	Thailand	Wheat	Feb 25/Mar 10	42,000	21.50
PNW	Pakistan*	Soybeans	Feb 16/27	10,000	59.45
Brazil	N. China	Hvy Grain	Feb 10/18	58,000	27.50
Brazil	N. France	Grains	Mar 12/20	25,000	26.00
River Plate	Poland	Grains	Feb 21/26	30,000	36.00
River Plate	Poland	Grains	Apr 1/10	25,000	34.75

Rates shown are for metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicates; op = option

Source: Maritime Research Inc. (www.maritime-research.com)

<sup>\*75</sup> percent of food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are limited in availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

Figure 13
Weighted average rates<sup>1</sup> for containerized shipments of animal feed and soybeans to selected Asian countries



<sup>&</sup>lt;sup>1</sup>Animal Feed: Busan-Korea (12%), Kaohsiung-Taiwan (34%), Tokyo-Japan (35%), Hong Kong (13%), Bangkok-Thailand (6%) and soybeans: Busan-Korea (1%), Keelung-Taiwan (89%), Tokyo-Japan (8%), Bangkok-Thailand (1%), Hong Kong (1%) Quarter 4, 2005.

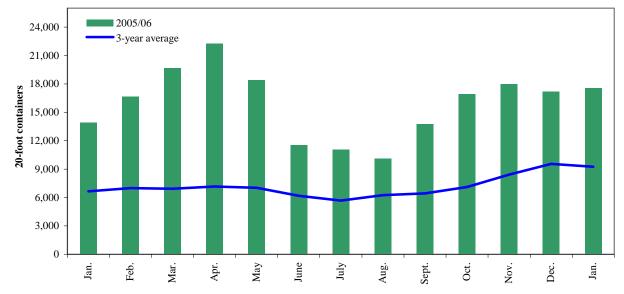
Source: Ocean Rate Bulletin, Transportation & Marketing Programs/AMS/USDA

Container ocean freight rates – average rate per twenty-foot equivalent unit (TEU) weighted by shipping line market share and trade route.

During 2005, containers were used to transport 4 percent of total U.S. grain exported, and 5 percent of total U.S. grain exported to Asia.

Figure 14

Monthly Shipments of Containerized Grain to Asia

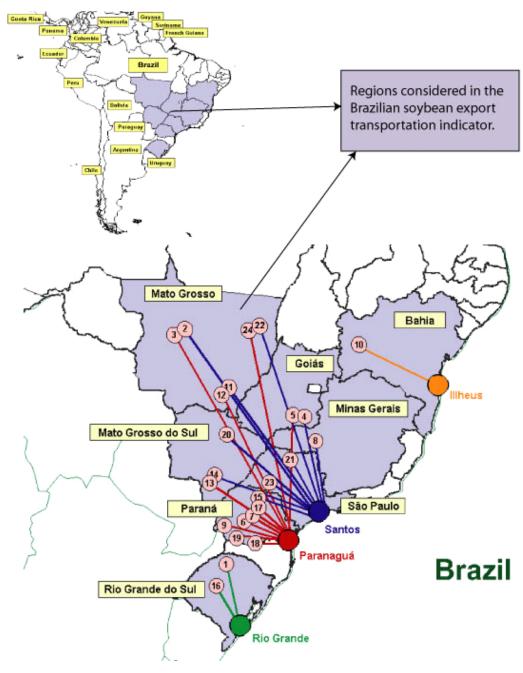


Source: Port Import Export Reporting Service (PIERS), Journal of Commerce

Note: PIERS data is available with a lag of approximately 40 days

### **Brazil Transportation**

Figure 15 Routes and Regions considered in the Brazilian soybean export transportation indicator <sup>1</sup>

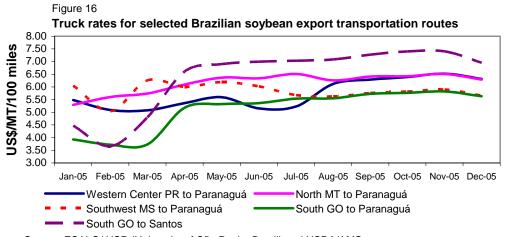


<sup>&</sup>lt;sup>1</sup>Regions comprised 84 percent of Brazilian soybean production, 2003 Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

Table 18--Truck rates for selected Brazilian soybean export transportation routes, 4th quarter 2005

	Origin <sup>1</sup>	•	Distance	•	Freight price
Route #	(reference city)	Destination	(miles) <sup>2</sup>	Weight(%) <sup>3</sup>	(per 100 miles) <sup>4</sup>
1	Northwest RS <sup>5</sup> (Cruz Alta)	Rio Grande	288	16.6	4.58
2	North MT(Sorriso)	Santos	1190	10.1	6.94
3	North MT(Sorriso)	Paranaguá	1262	9.5	6.41
4	South GO(Rio Verde)	Santos	587	7.0	7.25
5	South GO(Rio Verde)	Paranaguá	726	5.6	5.74
6	North Center PR(Londrina)	Paranaguá	268	4.4	7.93
7	Western Center PR(Mamborê)	Paranaguá	311	3.9	6.41
8	Triangle MG(Uberaba)	Santos	339	3.8	9.98
9	West PR(Assis Chateaubriand)	Paranaguá	377	3.7	6.34
10	West Extreme BA(São Desidério)	Ilhéus	544	3.6	7.87
11	Southeast MT(Primavera do Leste)	Santos	901	3.6	6.97
12	Southeast MT(Primavera do Leste)	Paranaguá	975	3.3	6.22
13	Southwest MS(Maracaju)	Paranaguá	612	3.1	5.79
14	Southwest MS(Maracaju)	Santos	652	2.9	6.24
15	West PR(Assis Chateaubriand)	Santos	550	2.5	5.85
16	Western Center RS(Tupanciretã)	Rio Grande	273	2.4	5.74
17	Southwest PR(Chopinzinho)	Paranaguá	291	2.3	9.17
18	Eastern Center PR(Castro)	Paranaguá	130	2.3	9.96
19	South Center PR(Guarapuava)	Paranaguá	204	2.1	8.67
20	North Center MS(São Gabriel do Oeste)	Santos	720	2.0	5.62
21	Ribeirão Preto SP(Guairá)	Santos	314	1.5	8.27
22	Northeast MT(Canarana)	Santos	950	1.4	7.87
23	Assis SP(Palmital)	Santos	285	1.2	7.85
24	Northeast MT(Canarana)	Paranaguá	1075	1.2	6.96
	Average		626	100	6.64

Although each origin region comprises several cities, the main city is considered as a reference to establish the freight price



Source: ESALQ/ USP (University of São Paulo, Brazil) and USDA/AMS

<sup>&</sup>lt;sup>2</sup>Distance from the main city of the considered region to the mentioned ports

<sup>&</sup>lt;sup>3</sup>The weight is directly proportional to the amount of production in each region

<sup>&</sup>lt;sup>4</sup>US\$ per metric ton (average monthly exchange rate from "Banco Central do Brasil" was used to convert Brazilian reais to the U.S. dollar)

<sup>&</sup>lt;sup>5</sup>RS = Rio Grande Do Sul, MT= Mato Grosso, GO = Goiás, PR = Paraná, MG = Minas Gerais, BA = Bahia, MS = Mato Grosso Do Sul, SP = São Paulo Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

Table 19--Monthly Brazilian soybean export truck transportation cost index

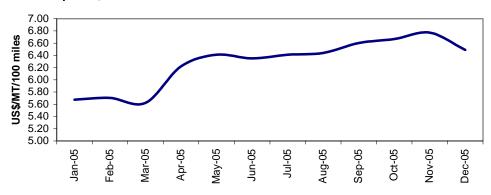
Month	Freight price*	Index variation (%)	Index value
Month	(per 100 miles)	(Base: prior month)	(Base: Jan. $05 = 100$ )
Jan. 05	5.67		100.00
Feb. 05	5.71	0.5	100.54
Mar. 05	5.62	-1.5	99.08
Apr. 05	6.22	10.6	109.61
May 05	6.41	3.1	112.96
Jun. 05	6.35	-0.9	111.90
Jul. 05	6.41	1.0	112.99
Aug. 05	6.44	0.4	113.46
Sep. 05	6.60	2.5	116.36
Oct. 05	6.67	1.0	117.52
Nov. 05	6.77	1.5	119.33
Dec. 05	6.49	-4.2	114.34

<sup>\*</sup>weighted average and quoted in US\$ per metric ton

Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

Figure 17

Brazilian soybean export truck transportation weighted average prices, 2005



Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

Table 20--Quarterly ocean freight rates for shipping soybeans from selected Brazilian ports to Hamburg, Germany (US\$/metric ton)\*

	2005	2005	2005	2005
Ports	1st qtr	2nd qtr	3rd qtr	4th qtr
Santos	45.53	45.84	44.54	56.73
Paranagua	44.64	44.84**	43.54	55.73
Rio Grande	44.20	44.39	43.04	55.23

<sup>\*</sup>correspond to the average actual values negotiated between shippers and carriers and weighted according to the magnitude of the shipped volumes Source: Sistema de Informações de Fretes, SIFRECA, ESALQ/USP (University of São Paulo, Brazil)

<sup>\*\*</sup>Revised figure

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#### **Related Websites**

Agricultural Container Indicators
Ocean Rate Bulletin

http://www.ams.usda.gov/tmd2/agci/ http://www.ams.usda.gov/tmd/Ocean/index.asp

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